What is claimed is:

1. An active voltage limiting and equalizing system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

an electrical circuit connected to the energy storage cell and powered by the energy storage cell, the electrical circuit adapted to draw a significant amount of power from the energy storage cell when the cell voltage Vcell reaches a maximum voltage Vmax to reduce the cell voltage Vcell, to stop drawing the significant amount of power to reduce the cell voltage Vcell when the cell voltage Vcell reaches a minimum voltage Vmin, and to draw no power when the cell voltage Vcell reaches a shutdown voltage Vshutdown.

2. The system of claim 1, wherein the electrical circuit is adapted to limit and equalize the cell voltage Vcell of energy storage cells of a multiple energy storage cell pack in series.

3. The system of claim 1, wherein the electrical circuit is adapted to limit and equalize voltage of one or more parallel groups of energy storage cells of a multiple energy storage cell pack in series.

4. The system of claim 1, wherein the electrical circuit includes at least an amplifier and a power transistor to draw the significant amount of power from the energy storage cell when the cell voltage Vcell reaches a maximum voltage Vmax to reduce the cell voltage Vcell.

5. The system of claim 1, wherein the significant amount of voltage is the voltage required to drive at least an amplifier and a power transistor.

6. The system of claim 1, wherein the energy storage cell is at least one of one of multiple energy storage cells of a multiple energy storage cell pack in series and one of one or more parallel groups of a multiple energy storage cell pack in series, and all serial cells are clamped at a set voltage to perform an equalization function to increase the storage life of each cell and minimize the need for a operational precharge of the energy storage cell pack.

7. The system of claim 6, wherein all serial cells are clamped at the minimum voltage Vmin.

8. The system of claim 1, wherein the energy storage cell may include at least one of an individual energy storage cell and a group of parallel energy storage cells.

9. The system of claim 1, wherein the energy storage cell is a capacitor of an ultracapacitor energy storage cell pack.

10. The system of claim 1, wherein the energy storage cell is electrically isolated from all other energy storage cells of a multiple energy storage cell pack.

11. An active voltage limiting and equalizing system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

an electrical circuit connected to the energy storage cell and powered by the energy storage cell, the electrical circuit including means for drawing a significant amount of power from the energy storage cell when the cell voltage Vcell reaches a maximum voltage Vmax to reduce the cell voltage Vcell, means for stopping the drawing of the significant amount of power to reduce the cell voltage Vcell when the cell voltage Vcell reaches a minimum voltage Vmin, and means for stopping the drawing of any power when the cell voltage Vcell reaches a shutdown voltage Vshutdown.

12. A failure detection system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

an electrical circuit connected to the energy storage cell, and adapted to indicate a cell active condition when a cell voltage Vcell is above a threshhold active voltage Vactive, and to indicate a cell inactive condition when the cell voltage Vcell drops below the threshhold active voltage Vactive.

13. The system of claim 12, wherein the electrical circuit includes at least two opto-isolators to indicate the cell active condition when the cell voltage is above the threshhold active voltage Vactive.

14. The system of claim 12, wherein the circuit includes a voltage threshold device to set the threshhold active voltage Vactive.

15. The system of claim 14, wherein the voltage threshold device is a zener diode.

16. The system of claim 12, further including a LED to indicate the cell active condition.

17. The system of claim 16, wherein the same LED indicates the cell inactive condition.

18. The system of claim 12, wherein the energy storage cell is an energy storage cell in a multiple cell array.

19. The system of claim 18, further including a LED array corresponding to the multiple cell array, a LED driver to activate a LED in the LED array corresponding to the energy storage cell when the cell voltage Vcell is above the threshhold active voltage Vactive.

20. The system of claim 20, further including a X shift register and a Y shift register to generate and communicate an address of an active energy storage cell to the LED driver to activate a LED in the LED array corresponding to the energy storage cell when the cell voltage Vcell is above the threshhold active voltage Vactive.

21. The system of claim 12, wherein the energy storage cell is a capacitor of an ultracapacitor energy storage cell pack.

22. The system of claim 12, wherein the electrical circuit is an optically isolated circuit adapted to be interrogated to detect and indicate a cell active or cell inactive condition.

23. A failure detection system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

an electrical circuit connected to the energy storage cell and including means for indicating a cell active condition when a cell voltage Vcell is above a threshhold active voltage Vactive, and means for indicating a cell inactive condition when the cell voltage Vcell drops below the threshhold active voltage Vactive.

24. An active voltage limiting and failure detection system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

a first electrical circuit connected to and powered by the energy storage cell, the first electrical circuit adapted to draw a significant amount of power from the energy storage cell when a cell voltage Vcell reaches a maximum voltage Vmax to reduce the cell voltage Vcell, to stop drawing the significant amount of power to reduce the cell voltage Vcell when the cell voltage Vcell reaches a minimum voltage Vmin, and to draw no power when the cell voltage Vcell reaches a shutdown voltage Vshutdown; and

a second electrical circuit connected to the energy storage cell and adapted to indicate a cell active condition when the cell voltage Vcell is above a threshhold active voltage Vactive, and to indicate a cell inactive condition when the cell voltage Vcell drops below the threshhold active voltage Vactive.

25. An active voltage limiting and failure detection system for an energy storage cell of a multiple energy storage cell pack, the energy storage cell having a cell voltage Vcell, the system comprising:

a first electrical circuit connected to and powered by the energy storage cell, the first electrical circuit includes means for drawing a significant amount of power from the energy storage cell when a cell voltage Vcell reaches a maximum voltage Vmax to reduce the cell voltage Vcell, means for stopping the drawing of the significant amount of power to reduce the cell voltage Vcell when the cell voltage Vcell reaches a minimum voltage Vmin, and means for drawing no power when the cell voltage Vcell reaches a shutdown voltage Vshutdown; and

a second electrical circuit connected to the energy storage cell and including means for indicating a cell active condition when the cell voltage Vcell is above a threshhold active voltage Vactive, and means for indicating a cell inactive condition when the cell voltage Vcell drops below the threshhold active voltage Vactive.